
11. Square

Program Name: Square.java

Input File: square.dat

When you start to learn about computer vision, you start discovering squares in all images. In this problem you are going to determine the number of squares in an image. You shall be given an image of size $N \times M$ where each pixel is either white or black. For the sake of the problem, we'll say that '.' is white and 'x' is black.

Determine how many different fully black squares exist in the images.

Input

The first line of input will contain a single integer T , the number of test cases.

The first line of each test case contains two integers, N and M , the number of rows and columns respectively

The following N lines each contain a M characters, which will be either a '.' or 'x'.

Output

For each test case, print out the number of fully black squares there are in the image.

Constraints

1 $\leq T \leq 10$
1 $\leq N \leq 100$
1 $\leq M \leq 100$

Example Input File

```
3
2 2
xx
.x
2 2
xx
xx
3 3
xx.
xxx
.xx
```

Example Output to Screen

```
3
5
9
```